

APPLICANT: Laudano et al.
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IN THE CLAIMS:

Please cancel claims 1-23 without prejudice to Applicants' rights thereto.

Claims 1-23 (cancelled)

Please add the following new claims:

24. (New) A discharge lamp for use in tanning applications comprising:

an elongated vitreous tube having an outer periphery and axially opposed first and second ends which define an axial length for the tube therebetween, the outer periphery including a plurality of regions defined along said axial length wherein a first region extends over a predetermined first central portion of said axial length and has a helical groove path defining a series of axially spaced apart grooves;

a first electrode assembly associated with the first end of the tube;

a second electrode assembly associated with the second end of the tube; and

a coating on an interior of the vitreous tube along the entire length for emitting ultraviolet radiation in a tanning wavelength when a voltage is applied across the first and second electrodes.

25. (New) A discharge lamp as recited in Claim 1, wherein the first central region emits radiation having an intensity different than emitted from a second end region and a third end region of the outer periphery.

26. (New) A discharge lamp as recited in Claim 25, wherein the axial length of the second end region is between about 3.0 inches and about 6.0 inches.

27. (New) A discharge lamp as recited in Claim 24, wherein the first central region extends axially between the first and second electrode assemblies.

28. (New) A discharge lamp as recited in Claim 24, wherein the lamp has a length of between about 70 inches and about 72 inches and the first central region has a length of between about 61 and about 65 inches.

29. (New) A discharge lamp as recited in Claim 24, wherein the grooves of the first region are formed in a plane which intersects the axis of the tube at an acute angle.

30. (New) A discharge lamp as recited in Claim 24, further comprising a reflective coating on the interior of the vitreous tube and positioned radially inward of the coating, the reflective coating extending about a portion of the vitreous tube circumference.

31. (New) A discharge lamp for use in tanning applications, comprising:
an elongated vitreous tube having an outer periphery and axially opposed first and second ends which define a length for the tube therebetween, the outer periphery including at least first and second regions defined along said axial length, wherein the first region extends

over a predetermined first central portion of said axial length and has a helical groove path defining a series of axially spaced apart grooves and emitting radiation of a tanning wavelength having an intensity greater than that emitted from the second region;

 a first electrode assembly associated with the first end of the tube;
 a second electrode assembly associated with the second end of the tube; and
 a coating on an interior of the vitreous tube along the entire length for emitting ultraviolet radiation when a voltage is applied across the first and second electrodes.

32. (New) A discharge lamp as recited in Claim 31, wherein the grooves of the first region are formed in a plane which intersects the axis of the tube at an acute angle.

33. (New) A discharge lamp as recited in Claim 31, wherein the grooves of the first central region have a depth of between about 0.05 inch and about 0.1 inch.

34. (New) A discharge lamp as recited in Claim 31, further comprising a reflective coating on the interior of the vitreous tube and positioned radially inward of the coating, the reflective coating extending about a portion of the vitreous tube circumference.

35. (New) A discharge lamp as recited in Claim 31, wherein the axial length of the second end region is between about 3.0 inches and about 6.0 inches.

36. (New) A discharge lamp as recited in Claim 31, wherein the first region extends axially between the first and second electrode assemblies.

37. (New) A discharge lamp as recited in Claim 31, wherein the lamp has a length of between about 70 inches and about 72 inches and the first region has a length of between about 61 and about 65 inches.

38. (New) A method of exposing a substrate to ultraviolet radiation of varying intensity comprising the steps of

 a) providing a substrate to be exposed;
 b) positioning a discharge lamp assembly in proximity to the substrate, the discharge lamp including:

 an elongated vitreous tube having an outer periphery and axially opposed first and second ends which define an axial length for the tube therebetween, the outer periphery including a plurality of regions defined along said axial length wherein a first region extends over a predetermined first central portion of said axial length and has a helical groove path defining a series of axially spaced apart grooves;

 a first electrode assembly associated with the first end of the tube;

 a second electrode assembly associated with the second end of the tube; and

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a coating on an interior of the vitreous tube along the entire length for emitting ultraviolet radiation in a tanning wavelength when a voltage is applied across the first and second electrodes.